SEMICONDUCTOR DEVICE

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Abstract of JP4142070

PURPOSE:To enhance optical transmission and minimize internal stress by using an epoxy resin composition which contains crackless sphere-shaped silica fine particles wherein a differential refractive index between the sphere-shaped silica fine particles and a curing body of a resin component is in a specific range. CONSTITUTION:An optical semiconductor device is sealed with an epoxy resin composition which comprises transparent epoxy resin (A), a hydride group curing agent (B), and crackless silica sphere-shaped fine particles (D) wherein the difference between the refractive index of the silica fine particles of the component (D) and the refractive index of the epoxy resin curing body comprising the component (A) to (C) is set to be in the range of + or -0.01. The crackless sphere-shaped silica fine particles are used in this manner. Moreover, the refractive index of the silica sphere-shaped fine particles is arranged to approximate that of the epoxy resin curing body by using the special sphere-shaped fine particles. This construction makes it possible to obtain an optical semiconductor sealing resin composition which is excellent in terms of its optical transmittance and moreover in terms of its low stress performance.